Attorney Docket No. 2003B002/2

Reply to Final Office Action dated March 16, 2010

Date: May 17, 2010

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listing of claims in this application.

Listing of Claims:

- 1. (Currently Amended) An article comprising:
 - (a) a first layer comprising a low crystallinity polymer having from 72 wt% to about 90 wt% propylene and from 10 wt% to [[20]] 28 wt% ethylene, based on the total weight of the low crystallinity polymer; a melting point, as determined by DSC, of from 20 °C to 110 °C; a Mooney viscosity (ML(1+4)@125°C) of 60 or less; and a polypropylene crystallinity of from 3% to 40%, as determined by DSC; and
 - (b) a second layer comprising a high crystallinity polymer comprising polypropylene, wherein said high crystallinity polymer has:
 - a melting point as determined by DSC which is at least 25°C higher than that of said low crystallinity polymer, and
 - a polypropylene crystallinity that is greater than 40% and higher than that of the low crystallinity polymer;

wherein said second layer is capable of undergoing plastic deformation upon elongation.

- 2. (Previously Presented) The article of claim 1, wherein said low crystallinity polymer and said high crystallinity polymer have compatible crystallinity.
- 3. (Previously Presented) The article of claim 2, wherein said low crystallinity polymer and said high crystallinity polymer have stereoregular polypropylene crystallinity.

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4. (Previously Presented) The article of claim 1, wherein the first layer further comprises an additional polymer.

- 5. (Previously Presented) The article of claim 4, wherein said additional polymer is the same as said high crystallinity polymer.
- 6. (Previously Presented) The article of claim 4, wherein said additional polymer is different from said high crystallinity polymer.
- 7. (Previously Presented) The article of claim 6, wherein said additional polymer is more crystalline than said low crystallinity polymer.
- 8. (Previously Presented) The article of claim 4, wherein said additional polymer is present in an amount of from 2wt% to 30wt%, based on the total weight of said first layer.
- 9. (Previously Presented) The article of claim 4, wherein said additional polymer is present in an amount of from 5wt% to 20wt%, based on the total weight of said first layer.
- 10. (Previously Presented) The article of claim 1, wherein said ethylene is present in said low crystallinity polymer in an amount of 16.2 wt% or 17.0 wt% based on the total weight of said low crystallinity polymer.
- 11. (Cancelled)
- 12. (Previously Presented) The article of claim 1, wherein said low crystallinity polymer has a triad tacticity of \geq 75%.
- 13. (Previously Presented) The article of claim 12, wherein said low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.
- 14. (Previously Presented) The article of claim 1, wherein said low crystallinity polymer has a heat of fusion as determined by DSC of from 20 J/g to 75 J/g.

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15. (Previously Presented) The article of claim 1, wherein said low crystallinity polymer has

a molecular weight distribution of from 2.0 to 4.5.

16. (Previously Presented) The article of claim 1, wherein said polypropylene is a

homopolymers or copolymer of propylene and one or more comonomers selected from ethylene

and C_4 - C_{12} α -olefins.

17. (Original) The article of claim 16, wherein said one or more comonomers is ethylene.

18. (Previously Presented) The article of claim 3, wherein said polypropylene is a

homopolymers or copolymer of propylene and one or more comonomers selected from ethylene

and C_4 - C_{12} α -olefins.

19. (Previously Presented) The article of claim 1, wherein said polypropylene is a random

copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α-

olefins, and wherein said one or more comonomers is present in said copolymer in an amount of

from 2wt% to 9 wt%, based on the total weight of said copolymer.

20. (Original) The article of claim 19, wherein said one or more comonomers is ethylene.

21.-22. (Cancelled)

23. (Previously Presented) The article of claim 1, wherein said first layer is in contact with

said second layer.

24. (Previously Presented) The article of claim 23, wherein said article comprises an

additional layer in contact with said second layer.

25. (Previously Presented) The article of claim 23, wherein said article comprises an

additional layer in contact with said first layer.

26. (Previously Presented) The article of claim 25, wherein said additional layer is more

crystalline than said first layer.

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27. (Previously Presented) The article of claim 25, wherein said additional layer is less crystalline than said first layer.

28. (Currently Amended) An article comprising:

- (a) a first layer comprising a low crystallinity polymer having from 72 wt% to about 90 wt% propylene and from 10 wt% to [[20]] 28 wt% ethylene, based on the total weight of the low crystallinity polymer; a melting point, as determined by DSC, of from 20°C to 110°C; a Mooney viscosity (ML(1+4)@125°C) of 60 or less; and a polypropylene crystallinity of from 3% to 40%, as determined by DSC; and
- (b) a plastically deformed second layer comprising a high crystallinity polymer comprising polypropylene, wherein said high crystallinity polymer has:
 - a melting point as determined by DSC which is at least 25°C higher than that of said low crystallinity polymer, and
 - a polypropylene crystallinity that is greater than 40% and higher than that of the low crystallinity polymer.
- 29. (Original) The article of claim 28, wherein said article has a Haze value of greater than 70%.
- 30. (Original) The article of claim 28, wherein said article has a Haze value of greater than 80%.
- 31. (Original) The article of claim 28, wherein said article has a Haze value of greater than 90%.
- 32. (Original) The article of claim 28, wherein said article has a load loss of less than 70%.
- 33. (Original) The article of claim 28, wherein said article has a load loss of less than 60%.

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34. (Original) The article of claim 28, wherein said article has a load loss of less than 55%.

35. (Original) The article of claim 28, wherein said article has a tension set of less than 20%.

36. (Original) The article of claim 28, wherein said article has a tension set of less than 15%.

37. (Original) The article of claim 28, wherein said article has a tension set of less than 10%.

38. (Original) The article of claim 28, wherein said article is a film having two or more

layers.

39. (Previously Presented) The article of claim 28, wherein said low crystallinity polymer

and said high crystallinity polymer have compatible crystallinity.

40. (Previously Presented) The article of claim 39, wherein said low crystallinity polymer

and said high crystallinity polymer have stereoregular polypropylene crystallinity.

41. (Previously Presented) The article of claim 28, wherein the first layer further comprises

an additional polymer.

42. (Previously Presented) The article of claim 28, wherein said additional polymer is the

same as the high crystallinity polymer.

43. (Previously Presented) The article of claim 28, wherein said additional polymer is

different from the high crystallinity polymer.

44. (Previously Presented) The article of claim 43, wherein said additional polymer is more

crystalline than said low crystallinity polymer.

45. (Previously Presented) The article of claim 41, wherein said additional polymer is

present in an amount of from 2wt% to 30wt%, based on the total weight of said first layer.

46. (Previously Presented) The article of claim 41, wherein said additional polymer is

present in an amount of from 5wt% to 20wt%, based on the total weight of said first layer.

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47. (Previously Presented) The article of claim 28, wherein said low crystallinity polymer ethylene is present in said low crystallinity polymer in an amount of 16.2 wt% or 17.0 wt% based on the total weight of said low crystallinity polymer.

48. (Cancelled)

49. (Previously Presented) The article of claim 28, wherein said low crystallinity polymer

has a triad tacticity of ≥ 75 .

50. (Previously Presented) The article of claim 49, wherein said low crystallinity polymer

has a melting point as determined by DSC of from 35°C to 70°C.

51. (Previously Presented) The article of claim 28, wherein said low crystallinity polymer

has a heat of fusion as determined by DSC of from 20 J/g to 75 J/g.

52. (Previously Presented) The article of claim 28, wherein said low crystallinity polymer

has a molecular weight distribution of from 2.0 to 4.5.

53. (Previously Presented) The article of claim 28, wherein said polypropylene is a

homopolymer or copolymer of propylene and one or more comonomers selected from ethylene

and C_4 - C_{12} α -olefins.

54. (Previously Presented) The article of claim 39, wherein said polypropylene is a

homopolymer or copolymer of propylene and one or more comonomers selected from ethylene

and C_4 - C_{12} α -olefins.

55. (Previously Presented) The article of claim 28, wherein said polypropylene is a random

copolymer of propylene and one or more comonomers selected from ethylene and C₄-C₁₂ α-

olefins, and wherein said one or more comonomers is present in said copolymer in an amount of

from 2wt% to 9 wt%, based on the total weight of said copolymer.

56. (Original) The article of claim 55, wherein said one or more comonomers is ethylene.

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57. (Previously Presented) The article of claim 28, wherein said high crystallinity polymer further comprises a homopolymer or copolymer of ethylene and one or more comonomers

selected from C_3 - C_{20} α -olefins.

58. (Original) The article of claim 57, wherein said one or more comonomers is present in

said copolymer in an amount of from 2wt% to 25wt%, based on the total weight of said

copolymer.

59. (Previously Presented) The article of claim 28, wherein said first layer is in contact with

said plastically deformed second layer.

60. (Previously Presented) The article of claim 59, wherein said article comprises an

additional layer in contact with said plastically deformed second layer.

61. (Previously Presented) The article of claim 59, wherein said article comprises an

additional layer in contact with said first layer.

62. (Previously Presented) The article of claim 61, wherein said additional layer is more

crystalline than said first layer.

63. (Previously Presented) The article of claim 61, wherein said additional layer is less

crystalline than said first layer.

64. (Original) A garment portion comprising the article of claim 28 adhered to a garment

substrate.

65. (Original) The garment portion of claim 64, wherein said garment portion is a diaper

backsheet.

Claims 66.-142. (Cancelled).

143. (Currently Amended) A multilayer article comprising:

(a) a first layer comprising a low crystallinity polymer in contact with

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(b) a plastically deformed second layer comprising a high crystallinity polymer,

wherein the low crystallinity polymer comprises from 72 wt% to about 90 wt% propylene and from 10 wt% to [[20]] 28 wt% ethylene, based on the total weight of the low crystallinity polymer; a melting point, as determined by DSC, of from 20°C to 110°C; a Mooney viscosity (ML(1+4)@125°C) of 60 or less; and a polypropylene crystallinity of from 3% to 40%, as determined by DSC;

wherein the high crystallinity polymer comprises polypropylene; and

wherein the low crystallinity polymer and the high crystallinity polymer have compatible crystallinity, and the high crystallinity polymer has:

a melting point at least 25°C higher than that of the low crystallinity polymer, and

a polypropylene crystallinity that is greater than 40% and higher than that of the low crystallinity polymer.

- 144. (Original) The article of claim 143, wherein the article is a multilayer film.
- 145. (Previously Presented) The article of claim 143, wherein the low crystallinity polymer and high crystallinity polymer have stereoregular polypropylene crystallinity.
- 146. (Previously Presented) The article of claim 143, wherein said is present in said low crystallinity polymer in an amount of 16.2 wt% or 17.0 wt% based on the total weight of said low crystallinity polymer.
- 147. (Cancelled)
- 148. (Previously Presented) The article of claim 143, wherein the low crystallinity polymer has a triad tacticity of \geq 75%.
- 149. (Previously Presented) The article of claim 143, wherein the low crystallinity polymer has a heat of fusion as determined by DSC of from 20 J/g to 75 J/g.

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150. (Previously Presented) The article of claim 143, wherein the low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.

- 151. (Previously Presented) The article of claim 143, wherein the low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.
- 152. (Previously Presented) The article of claim 143, wherein the polypropylene is a homopolymer or copolymer of polypropylene with stereoregular propylene sequences.
- 153. (Previously Presented) The article of claim 143, wherein the polypropylene is a random copolymer of propylene and a comonomer selected from ethylene, C_4 - C_{12} α -olefins, and combinations thereof.
- 154. (Original) The article of claim 153, wherein the copolymer comprises 2 to 9% by weight polymerized comonomer based on the weight of the copolymer.
- 155. (Original) The article of claim 154, wherein the comonomer is ethylene.
- 156. (Original) The article of claim 143, wherein the article has a Haze value of greater than 70%.
- 157. (Original) The article of claim 143, wherein the article has a Haze value of greater than 80%.
- 158. (Original) The article of claim 143, wherein the article has a Haze value of greater than 90%.
- 159. (Original) The article of claim 143, wherein the article has a load loss of less than 70%.
- 160. (Original) The article of claim 143, wherein the article has a load loss of less than 60%.
- 161. (Original) The article of claim 143, wherein the article has a load loss of less than 55%.
- 162. (Original) The article of claim 143, wherein the article has a tension set of less than 20%.

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163. (Original) The article of claim 143, wherein the article has a tension set of less than 15%.

164. (Original) The article of claim 143, wherein the article has a tension set of less than 10%.

165. (Previously Presented) The article of claim 143, wherein the first layer further comprises

an additional polymer, wherein the low crystallinity polymer and the additional polymer have

compatible crystallinity.

166. (Previously Presented) The article of claim 165, wherein the additional polymer is a

propylene homopolymer or a copolymer of propylene and at least one comonomer selected from

ethylene, C₄-C₂₀ α-olefin, and combinations thereof, and wherein the amount of comonomer

present in the additional polymer is less than the amount of ethylene present in the low

crystallinity polymer.

167. (Previously Presented) The article of claim 165, wherein the additional polymer is

present in an amount of from 2 to 30% by weight based on the total weight of the first layer.

168. (Previously Presented) The article of claim 165, wherein the additional polymer is

present in an amount of from 5 to 20% by weight based on the total weight of the first layer.

169. (Previously Presented) The article of claim 143, wherein the article further comprises an

additional first layer in contact with the first layer.

170. (Previously Presented) The article of claim 143, wherein the article further comprises an

additional plastically deformed second layer in contact with the first layer.

171. (Original) A garment portion comprising the article of claim 143 adhered to a garment

substrate.

172. (Original) The garment portion of claim 68, wherein the garment portion is a diaper

backsheet.

173. (Currently Amended) A multilayer article comprising:

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(a) a first layer comprising a low crystallinity polymer in contact with

(b) a plastically deformed second layer comprising a high crystallinity polymer,

wherein the low crystallinity polymer comprises from 72 wt% to about 90 wt% propylene and from 10 wt% to [[20]] <u>28</u> wt% ethylene, based on the total weight of the low crystallinity polymer; a melting point, as determined by DSC, of from 20°C to 110°C; a Mooney viscosity (ML(1+4)@125°C) of 60 or less; and a polypropylene crystallinity of from 3% to 40%, as determined by DSC;

wherein the high crystallinity polymer comprises polypropylene; and

wherein the low crystallinity polymer and the high crystallinity polymer do not have similar crystallinity, and the high crystallinity polymer has:

a melting point at least 25°C higher than that of the low crystallinity polymer, and

a polypropylene crystallinity that is greater than 40% and higher than that of the low crystallinity polymer.

- 174. (Original) The article of claim 173, wherein the article is a multilayer film.
- 175. (Previously Presented) The article of claim 173, wherein the low crystallinity polymer has stereoregular polypropylene crystallinity and the high crystallinity polymer has ethylene crystallinity.
- 176. (Previously Presented) The article of claim 173, wherein said ethylene is present in said low crystallinity polymer in an amount of 16.2wt% or 17.0wt% based on the total weight of said low crystallinity polymer.
- 177. (Cancelled)
- 178. (Previously Presented) The article of claim 173, wherein the low crystallinity polymer has a triad tacticity of \geq 75%.

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179. (Previously Presented) The article of claim 173, wherein the low crystallinity polymer has a heat of fusion as determined by DSC of from 20 J/g to 75 J/g.

- 180. (Previously Presented) The article of claim 173, wherein the low crystallinity polymer has a melting point as determined by DSC of from 35°C to 70°C.
- 181. (Previously Presented) The article of claim 173, wherein the low crystallinity polymer has a molecular weight distribution of from 2.0 to 4.5.
- 182. (Previously Presented) The article of claim 173, wherein the polypropylene is a homopolymer or copolymer of ethylene and at least one comonomer selected from C_3 - C_{20} α -olefins, and combinations thereof, and wherein the comonomer is present in the high crystallinity polymer in an amount of from about 2wt% to about 25wt%.
- 183. (Original) The article of claim 182, wherein the comonomer is hexene.
- 184. (Original) The article of claim 173, wherein the article has a Haze value of greater than 70%.
- 185. (Original) The article of claim 173, wherein the article has a Haze value of greater than 80%.
- 186. (Original) The article of claim 173, wherein the article has a Haze value of greater than 90%.
- 187. (Original) The article of claim 173, wherein the article has a load loss of less than 70%.
- 188. (Original) The article of claim 173, wherein the article has a load loss of less than 60%.
- 189. (Original) The article of claim 173, wherein the article has a load loss of less than 55%.
- 190. (Original) The article of claim 173, wherein the article has a tension set of less than 20%.
- 191. (Original) The article of claim 173, wherein the article has a tension set of less than 15%.

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192. (Original) The article of claim 173, wherein the article has a tension set of less than 10%.

193. (Previously Presented) The article of claim 173, wherein the first layer further comprises

an additional polymer, wherein the low crystallinity polymer and the additional polymer have

compatible crystallinity.

194. (Previously Presented) The article of claim 193, wherein the additional polymer is a

propylene homopolymer or a copolymer of propylene and at least one comonomer selected from

ethylene, C₄-C₂₀ α-olefin, and combinations thereof, and wherein the amount of comonomer

present in the additional polymer is less than the amount of ethylene present in the low

crystallinity polymer.

195. (Previously Presented) The article of claim 193, wherein the additional polymer is

present in an amount of from 2 to 30% by weight based on the total weight of the first layer.

196. (Previously Presented) The article of claim 193, wherein the additional polymer is

present in an amount of from 5 to 20% by weight based on the total weight of the first layer.

197. (Previously Presented) The article of claim 173, wherein the article further comprises an

additional first layer in contact with the first layer.

198. (Previously Presented) The article of claim 173, wherein the article further comprises an

additional plastically deformed second layer in contact with the first layer.

Claims 199.-222. (Cancelled).

223. (New) An article comprising:

(a) a first layer comprising:

(i) a low crystallinity polymer having:

from 72 wt% to about 90 wt% propylene,

from 10 wt% to [[20]] 28 wt% ethylene, based on the total weight of the

low crystallinity polymer;

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a melting point, as determined by DSC, of from 20 °C to 110 °C;

- a Mooney viscosity (ML(1+4)@125°C) of 60 or less;
- a polypropylene crystallinity of from 3% to 40%, as determined by DSC;
- a triad tacticity of $\geq 75\%$;
- a molecular weight distribution of from 2.0 to 4.5; and
- (ii) an additional polymer; and
- (b) a second layer comprising:

a high crystallinity polymer comprising polypropylene having:

a melting point, as determined by DSC of at least 25°C higher than that of said low crystallinity polymer, and

a polypropylene crystallinity that is greater than 40% and higher than that of the low crystallinity polymer;

wherein:

the second layer is capable of undergoing plastic deformation upon elongation;

the article has a Haze value of greater than 90%, and

the article has a thickness of less than 20 mils.